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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,324	07/14/2003	Robert Charles Downs	36-000410US	7957

22798 7590 09/17/2004

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EXAMINER

HESS, DOUGLAS A

ART UNIT	PAPER NUMBER
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3651

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,324

Applicant(s)

DOWNS ET AL. 

Examiner

Douglas A Hess

Art Unit

3651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53-55 is/are allowed.
- 6) ☒ Claim(s) 1-13, 22-28, 36-42, 47 and 48 is/are rejected.
- 7) ☒ Claim(s) 14-21, 29-35, 43-46 and 49-52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6-9, 11-13, 22-28, 36-42, 47, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Herbermann et al. (US Pat. 5,697,480.)

See the attached marked up copy of Figures 1-2 depicting the claimed features.

RE the claims directed at the robot and the controller, Herbermann et al. do teach a robot as outlined in column 3, line 19+, even though they don't disclose all the features of a robot, the features being claimed are inherent in a robot and therefore would be inherent in Herbermann et al.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbermann et al. (US Pat. 5,697,480).

Herbermann teaches the claimed invention as shown on the attached marked up drawing figures 1-2. Herbermann fails to disclose the type of material utilized for his structural components. It would have been an obvious matter of design choice as to the type of well-known material being used to make a device based on the type of article being gripped and its frictional interaction with the device. The mere selection of well known materials for a specific environment does not provide a patentable departure from that of Herbermann et al.

RE claim 10, Herbermann does not teach the accuracy of his grasping device. It would have been an obvious matter of design choice as to the accuracy needed for a particular device based on the environment and the article being grasped, therefore the selection of a particular accuracy does not provide a patentable departure from the device of Herbermann.

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6. Claims 1-4, 6-13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoyama et al. (US Pat. 3,824,674).

Inoyama teaches the claimed features as shown on the attached marked up copy of figure 8B. Inoyama fails to teach just a first axis in which his arms are coupled. Inoyama teaches parallel side by side first axes. It would have been an obvious matter of design choice as to the number of axes used to pivot the grasping arms, based on design features, such as the size of the arms and the size of the object being grasped. The selection of one or two axes is a mere design feature that does not distinguish the device of the applicant over Inoyama.

RE claim10, Inoyama does not teach the accuracy of his grasping device. It would have been an obvious matter of design choice as to the accuracy needed for a particular device based on the environment and the article being grasped, therefore the selection of a particular accuracy does not provide a patentable departure from the device of Inoyama.

7. Claims 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbermann et al. (as cited above) in view of Smith et al. (US Pat. 6,012,895).

Herbermann teaches the claimed device except for the rollers on the arms. Smith teaches placing rollers on his pivoting grasping arms. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide rollers, as taught by Smith, on the arms of Herbermann, in order to provide a greater degree of gripping for different sized objects and also to provide a varying degree of friction for those different sized objects.

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Allowable Subject Matter

8. Claims 14-21, 29-35, 43-46, and 49-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 53-55 are allowed.

Conclusion

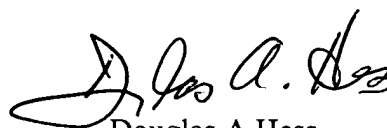
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas A Hess whose telephone number is 703-308-3428. The examiner can normally be reached on M-Thurs 5:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on 703-308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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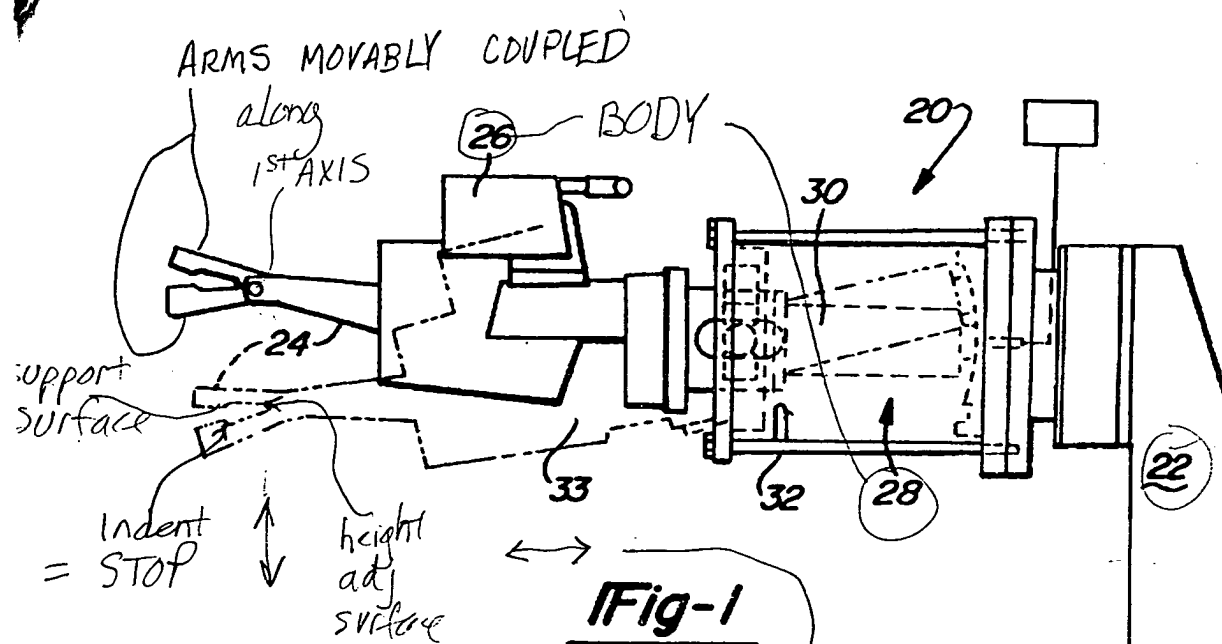
12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Douglas A Hess
Primary Examiner
Art Unit 3651

9-13-04

DAH
September 13, 2004



Inherent controller
Generic ROBOT ARM
(BCOM)
Inherently capable
and well-known
to provide
360° extend/retract,
vert, horiz movement

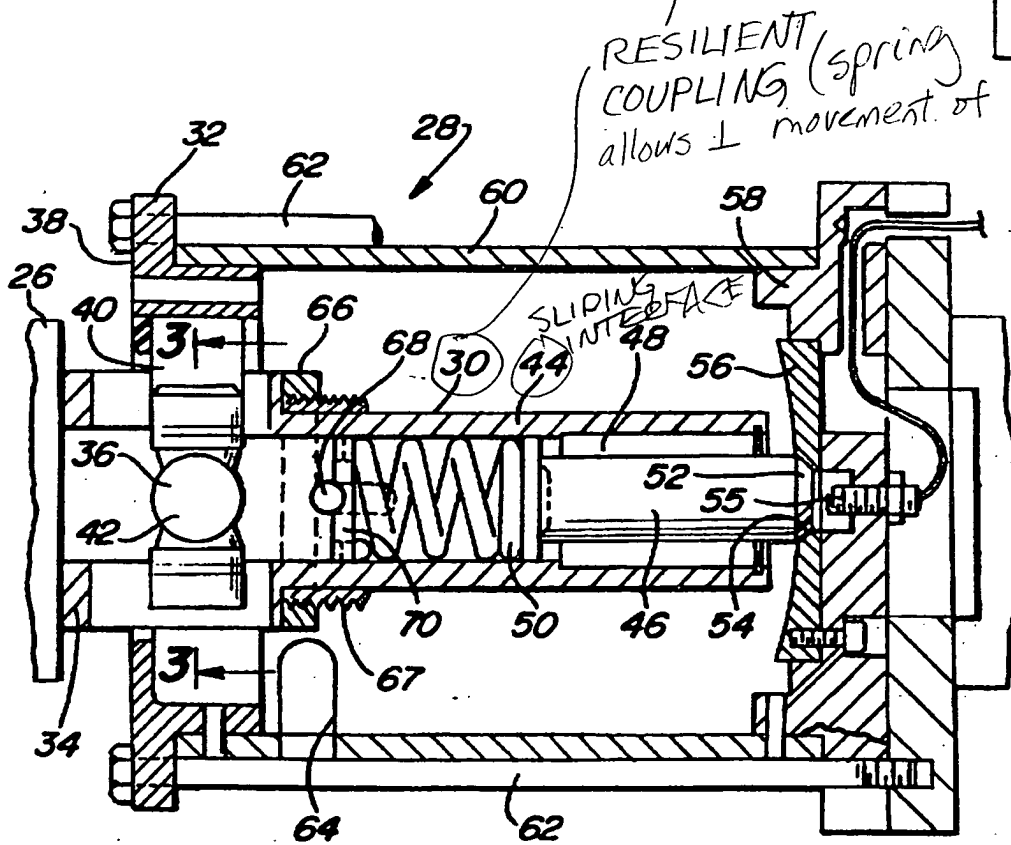


FIG. 7

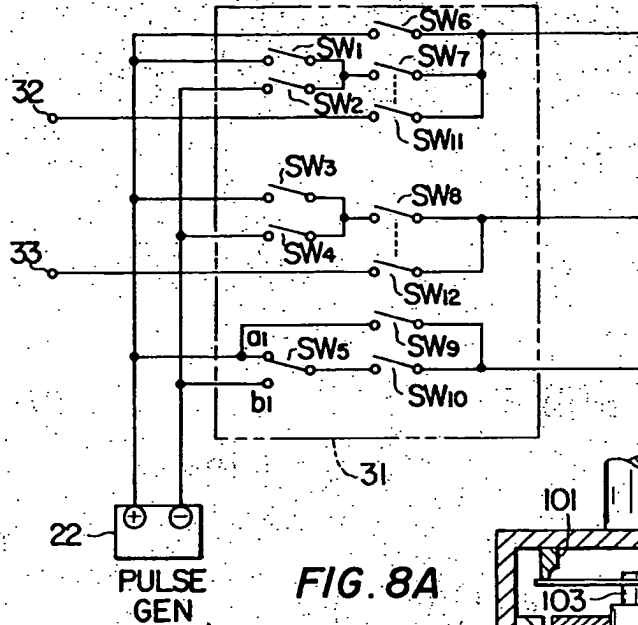


FIG. 8A

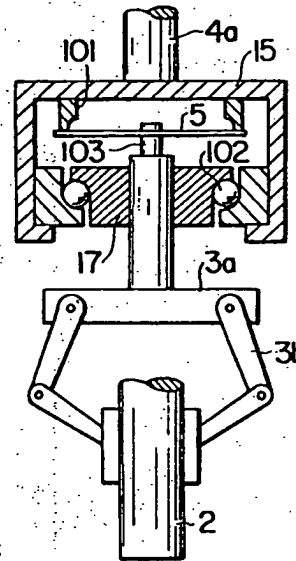


FIG. 8C

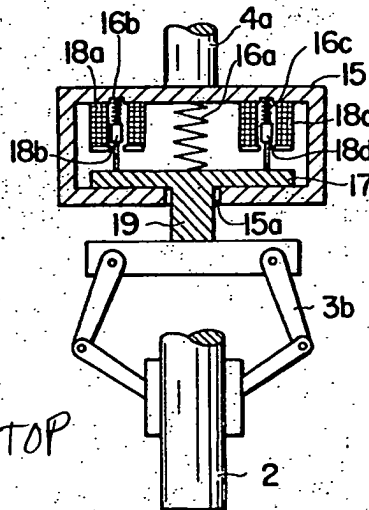
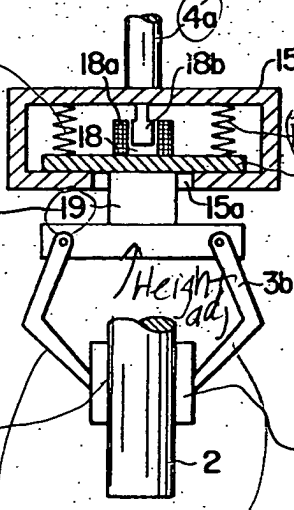


FIG. 8B



Resilient coupling spring

Body

Height

Support surface

STOP

Arms movably coupled

Robot Arm Chassis